Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently amended)**   A spherical aberration correcting apparatus comprising:

a test recording unit configured to perform a test recording on an optical recording medium;

a characteristic obtaining unit configured to obtain a characteristic corresponding to a parameter by the test recording, the parameter being correlated with a spherical aberration;

a correction amount deciding unit configured to decide an optimum correction amount of the spherical aberration so as to minimize the spherical aberration according to the characteristic of the parameter; and

a spherical aberration correcting unit configured to correct the spherical aberration according to the optimum correction amount of the spherical aberration,

wherein the characteristic obtaining unit is configured to detect a pit level and at least one of a read level, a write level and a recording power according to a light reflected from the optical recording medium while the test recording unit performs the test recording, wherein the pit level represents a level of the optical beam reflected from the optical disk while the optical beam is forming a pit during the test recording operation, and to obtain the characteristic of the pit ratio, the parameter including the pit level, the read level, the write level and the recording power, the pit ratio representing the ratio of one of the read level or the write level to the pit level.

Claims 2 and 3 are cancelled without prejudice.

4. (**Original**) A spherical aberration correcting apparatus according to claim 1, wherein the characteristic obtaining unit is configured to obtain the characteristic corresponding to the parameter while the test recording unit performs the test recording.

5. (**Original**) A spherical aberration correcting apparatus according to claim 4, wherein the characteristic obtaining unit is configured to detect a pit level as the parameter according to a light reflected from the optical recording medium while the test recording unit performs the test recording, and to obtain the characteristic of the pit level.

Claim 6 is cancelled without prejudice.

7. (**Original**) A spherical aberration correcting apparatus according to claim 1, wherein the test recording unit makes change to an amount of the spherical aberration within a range in which a predetermined value of the parameter is included while performing the test recording, the predetermined value of the parameter being set to correspond to a minimum of the spherical aberration.

8. (**Original**) A spherical aberration correcting apparatus according to claim 7, wherein the parameter includes a jitter, and the predetermined value of the jitter is minimum.

9. (**Original**) A spherical aberration correcting apparatus according to claim 7, wherein the parameter includes a β value, and the predetermined value of the β value is maximum.

10. **(Original)** A spherical aberration correcting apparatus according to claim 1, wherein the test recording unit is configured to perform the test recording immediately before a recording of information on the optical recording medium.

11. **(Currently Amended)**   An information recording system comprising:

a spherical aberration correcting apparatus provided with

a test recording unit configured to perform a test recording on an optical recording medium,

a characteristic obtaining unit configured to obtain a characteristic corresponding to a parameter according to the test recording, the parameter being correlated with a spherical aberration,

a correcting amount deciding unit configured to decide an optimum correcting amount of the spherical aberration so as to minimize the spherical aberration according to the characteristic of the parameter, and

a spherical aberration correcting unit configured to correct the spherical aberration according to the optimum correcting amount of the spherical aberration; and

a control unit configured to, when detecting that the optical recording medium is set to the information recording apparatus, make control the spherical aberration correcting apparatus to correct the spherical aberration,

wherein the characteristic obtaining unit is configured to detect a pit level and at least one of a read level, a write level and a recording power according to a light reflected from the optical recording medium while the test recording unit performs the test recording, wherein the pit level represents a level of the optical beam reflected from the optical disk while the optical beam is forming a pit during the test recording operation, and to obtain the characteristic of the pit ratio, the parameter including the pit level, the read level, the write

level and the recording power, the pit ratio representing the ratio of one of the read level or the write level to the pit level.

12. **(Currently Amended)**   A spherical aberration correcting method comprising the steps of:

performing a test recording on an optical recording medium;

obtaining a characteristic corresponding to a parameter by the test recording, the parameter being correlated with a spherical aberration;

deciding an optimum correction amount of the spherical aberration so as to minimize the spherical aberration according to the characteristic of the parameter; and

correcting the spherical aberration according to the optimum correction amount of the spherical aberration;

wherein the step of obtaining a characteristic comprises the steps of:

detecting a pit level and at least one of a read level, a write level and a recording power according to a light reflected from the optical recording medium while the test recording is performed, wherein the pit level represents a level of the optical beam reflected from the optical disk while the optical beam is forming a pit during the test recording operation; and

obtaining the characteristic of the pit ratio, the parameter including the pit level, the read level, the write level and the recording power, the pit ratio representing the ratio of one of the read level or the write level to the pit level.

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